DOCUMENT RESUME

ED 185 060 TM 800 040

TITLE Pilot Student Assessment Program 1st Year Progress Report 1979.
INSTITUTION Kansas State Dept. of Education, Topeka.
PUB DATE 79
NOTE 46p.

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Criterion Referenced Tests; *Educational Objectives; *Elementary School Mathematics; Elementary Secondary Education; *Minimum Competency Testing; *Reading Achievement; *Secondary School Mathematics; *State Programs; Testing Programs
IDENTIFIERS Kansas

ABSTRACT

The activities and results of the first year of a two-year student assessment pilot program are described, based on a 1978 mandate by the Kansas Legislature requiring the development of minimum competency objectives in the areas of reading and mathematics for students in grades 2, 4, 6, 8, and 11 and instruments for assessing those competencies. During the first year, the objectives were developed and criterion-referenced tests were administered to a stratified random sample of 4,635 students. Cautions regarding interpretation of these preliminary data are given. Lists are provided of those objectives for which the sample had the greatest success or greatest difficulty. (A few sample items and all the objectives for each grade level are appended). (Author/CTM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

ED 185080

Pilot Student Assessment Program 1st Year Progress Report 1979

TM800 040

Kansas State Board of Education

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
N. Flott
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

An Equal Employment/Educational Opportunity Agency

STATE BOARD OF EDUCATION

DISTRICT 1	Kay Groneman	Kansas City
DISTRICT 2	Ruthann Oelsner	Shawnee Mission
DISTRICT 3	George Frey	Topeka
DISTRICT 4	Dorothy Groesbeck	Manhattan
DISTRICT 5	Harold H. Crist	Scott City
DISTRICT 6	Marilyn Harwood	Glasco
DISTRICT 7	John Bergner	Pratt
DISTRICT 8	Tim Hiebert	Winfield
DISTRICT 9	Denise Apt	Iola
DISTRICT 10	Evelyn Whitcomb	Wichita

COMMISSIONER OF EDUCATION

Merle R. Bolton

ASSISTANT COMMISSIONER OF EDUCATION

L. C. Crouch

DIRECTOR, EDUCATIONAL ASSISTANCE

Eileen Heinen

GUIDANCE/COMPETENCY BASED EDUCATION SPECIALISTS

Willard Foster
Judith Hamilton

COMPETENCY BASED EDUCATION

STATEWIDE ASSESSMENT STEERING COMMITTEE

Parent	
Jan Akers	Shawnee Mission
Corinne Barrett	Topeka
Classroom Teacher K-3	
Kay Schultz	Wathena
Classroom Teacher 4-6	
Eula Allen	Salina
Classroom Teacher 7-8	
Darrell Thrasher	Wilson
Classroom Teacher Secondary	
Martin Robl	Little River
Elementary Principal	
Kenneth Rogers	Colby
Secondary Principal	
Bennie Frantz	Pratt
Superintendent	
Lance Nichols	Glasco
Howard L. Shuler	Columbus
Teacher Education	
Jordan Utsey	Kansas State University
School Board	
Denise C. Apt	Iola
John Welsh	Weskan
Test Specialist	
Gwen Nelson	Arkansas City

Math Specialist

Terry Parks	Shawnee Mission
Donald E. Darnell	Kansas City

Reading Specialist

Jim Howell	Wichita

Legislator

William J. Reardon	Kansas City
Joseph C. Harder	Moundridge

Business & Industry

Joe Avery	Arkansas City
John P. Judge	Garden City

Guidance Counselor

Carolyn Turney	Emporia

Director/Supervisor of Instruction

Lawrence Bechtold	Wichita
Owen Henson	Topeka

Non-Public

Robert Boland	Kansas City
Paul Koschmann	Leavenworth

TABLE OF CONTENTS

Foreword. 1

Limitations of the Testing Results. 2

Recommendations - Findings. 3

Purpose of Competency Based Education Assessment. 5

Methods of Measurement. 6

Who Was Tested. 7

Summary of Test Results 8

Grade 2 - Reading 9

Grade 2 - Mathematics 9

Grade 4 - Reading 10

Grade 4 - Mathematics 11

Grade 6 - Reading 12

Grade 6 - Mathematics 13

Grade 8 - Reading 14

Grade 8 - Mathematics 15

Grade 11 - Reading. 16

Grade 11 - Mathematics. 17

Appendix. 18

FOREWORD

The 1978 Kansas Legislature enacted legislation (K.S.A. 1978 Supp. 72-9401 et seq.) that required the State Board of Education to prescribe and implement a two-year pilot competency based education student assessment program. The mandate required the development of minimum competency objectives in the areas of reading and mathematics for students in grades 2, 4, 6, 8, and 11 and instruments for assessing those competencies.

During the first year (1978-1979) of the pilot program, the minimum competency objectives for the two content areas were developed and tests assessing those competencies were administered to a stratified, random sample of approximately 4,635 Kansas students. The information obtained from the activities of the first year of the pilot program provided the necessary feedback for refinement of both the minimum competency objectives and the assessment instruments to be used in the second year (1979-1980) of the pilot program during which all Kansas students in grades 2, 4, 6, 8, and 11 in public and private accredited schools will take the test.

We are gratified with the positive response we received from local school officials in carrying out the activities of the first year of the pilot program. More than 190 school districts, both public and private, volunteered to paricipate in this initial effort. We take this as a positive sign that local school districts share a professional interest in being accountable.

MERLE R. BOLTON
Commissioner of Education

LIMITATIONS OF THE TESTING RESULTS

The legislation (K.S.A. 1978 Supp. 72-9401 et seq.) authorizing the development and administration of a pilot student assesment program did not call for any study, review, and evaluation of the data and other information disseminated as a result of the two-year pilot testing until the interim between the 1980-1981 sessions of the legislature. Therefore, any interpretation or conclusions that might be drawn from this preliminary progress report regarding student performance should be considered premature. The results of the first year of the two-year pilot program are based on only a sampling of Kansas students who were administered the test in a trial setting. Since the objectives and the test instruments are undergoing revision, these data, therefore, are intended to be used only to assist in the process of refining the objectives and the tests. It is not the intention that the results of the first year of the pilot student assessment program be used to focus on identifying the specific level of performance of students. Any conclusions, judgments, opinions, and interpretations regarding student performance should not be made until after the final year of the study.

RECOMMENDATIONS - FINDINGS

Governor Carlin and the Kansas State Legislature are to be commended for their long-standing interest in ascertaining how well Kansas students are achieving in the basic competencies necessary to function as adults in our society and their willingness to provide the education and lay community an opportunity to explore the implications for an effective competency based education program.

The Kansas State Board of Education recommends to Governor Carlin and the Kansas State Legislature that:

A. The results of the assessment program be studied and evaluated during the interim session between the 1980-1981 sessions of the Legislature, as proposed in K.S.A. 1978 Supp. 72-9401 et seq.

B. The current staff of two persons during the interim study session compile, analyze, and evaluate the 1980 assessment data; interpret the results of the assessment to local education agencies, assisting them in appropriately using the results; and, report the evaluation activity to the State Board of Education and the Legislature.

FINDINGS

The findings from the first year of the pilot program allowed our testing specialists and steering committee to study and refine the objectives and the properties of the test instruments and the testing process.

Findings from the first year of the pilot student assessment program include the following:

A. Some objectives failed to specifically describe the skill areas to be measured.

B. Some test items failed to measure the skill described in the objectives.

C. Some test items were biased in favor of urban youth.

D. Some test items were written in language that was too technical for students at that grade level.

E. The results of the first year pilot test assisted the steering committee in addressing the perplexing problem of standard setting for the 1980 testing program.

PURPOSE OF COMPETENCY BASED EDUCATION ASSESSMENT

The two-year Pilot Student Assessment Program was created to achieve the following basic aims:

1. Establish minimum objectives to be achieved by all students in the areas of reading and mathematics in grades 2, 4, 6, 8, and 11.
2. Define minimum standards of competency in reading and mathematics at grades 2, 4, 6, 8, and 11.
3. Prepare and administer a pilot testing program to students in grades 2, 4, 6, 8, and 11.
4. Refine the minimum competency based tests administered during the 1978-79 academic school year; evaluate the results of the 1979-80 pilot program and report the composite results to the Governor, Legislature, and to the boards of local education agencies.
5. Determine from a two-year pilot program the specific needs and problems of a system of competency based education.
6. Prepare a report of the results to allow the Legislature to study and review the data in order to determine if competency based education programs are desirable in the state of Kansas.

METHOD OF MEASUREMENT

The Kansas minimum competency based tests were criterion-referenced tests. The tests were not designed to compare the achievement level of one student with that of another. Rather, the Kansas Criterion-Referenced Test was designed to measure whether a student had reached a set level of competency or "proficiency." These competencies were described in performance objectives which were developed by Kansas educators. The test items were then specifically designed to measure students' attainment of those objectives. Each objective was assessed by using three test items.

The Kansas minimum competency based tests do not generally imply a direct relationship between the test items and local program objectives, and thus it is difficult to determine the degree to which specific program outcomes have been achieved. Hence, it is imperative that each local school review the relevance of the assessed objective to its own instructional program.

Minimum competencies in the basic skill areas of reading and mathematics for grade levels 2, 4, and 6 are defined as those academic skills that need to be mastered before a student could reasonably be expected to achieve at the next level.

At grade levels 8 and 11 minimum competencies in the basic skills of reading and mathematics included the application of these skills in lifelike situations.

WHO WAS TESTED

A sample of approximately 4,635 Kansas students in grades 2, 4, 6, 8, and 11 participated in the 1978-1979 competency based education student assessment program.

The selection of the statewide sample of students was a two-stage process which consisted of first determining those schools who wished to volunteer for the pilot assessment and then selecting only students within each volunteering school district.

The school districts were representative of Kansas in two respects: (a) school district size, and (b) average per pupil expenditure.

The results of the 1978-1979 phase of the assessment program will be used to refine the objectives and the testing instruments prior to testing 172,000 students in April of 1980. For the 1979-1980 assessment program, the type of reporting will be modified to assist in the use of learner results at the local level.

SUMMARY OF TEST RESULTS

No attempt was made to place a pass/fail standard on the 1978-1979 test results. Since the major purpose of the first year of the pilot program was to refine the objectives and the test instruments, student and school identity were excluded. Therefore, there was no need for a pass/fail standard. However, for the 1979-1980 pilot student assessment program, this type of standard setting will be done.

The following test summaries will identify the objectives that were assessed by test items on which students performed with the greatest success, as well as those objectives assessed by test items with which students had the greatest difficulty.

GRADE 2 - READING

Fifteen reading objectives were tested at the second grade level. The average second grade student answered two out of three items correctly on 14 of the 15 objectives measured.

Second grade students had the greatest difficulty with test questions testing the following objective:*

12. Orally given a story, the learner will sequence illustrations of the main events.

GRADE 2 - MATHEMATICS

Fifteen mathematics objectives were tested at the second grade level. The average second grade student answered two out of three items correctly on all 15 of the objectives measured.

*The objectives in this report are abbreviated. See the appendix for the complete objectives.

GRADE 4 - READING

Twenty reading objectives were tested at the fourth grade level. The average fourth grade student answered two out of three items correctly on 15 of the 20 objectives measured.

Fourth grade students performed with greatest success on test questions testing the following objectives:

The learner will identify:

1. An oral word with the short vowel sound /ă/, /ĕ/, or /ŏ/
2. The meaning of an unfamiliar word in context
4. Two words that form a contraction
5. A singular or plural noun to correctly complete a sentence
6. The number of syllables in an oral word

Students had the greatest difficulty with test questions testing these objectives:

The learner will identify:

7. The correct use of a period, question mark, or comma
11. A sentence that summarizes a reading selection
16. A word found on a dictionary page with guide words
17. The definition of a word in context from a dictionary page
20. Page references for a topic in an index

GRADE 4 - MATHEMATICS

Twenty mathematics objectives were tested at the fourth grade level. The average fourth grade student answered two out of three items correctly on 17 of the 20 objectives measured.

Fourth grade students performed with greatest success on test questions testing the following objectives:

The learner will:

3. Identify the missing numeral on a whole number line
4. Identify the standard numeral for a 3- or 4-digit number in expanded notation
7. Add two 3-digit numbers with regrouping
10. Identify plane figures of the same size and shape
11. Identify the length of an object with a centimeter ruler

Students had the greatest difficulty with test questions testing these objectives:

The learner will:

6. Indicate the approximation of a 4-digit number to the nearest thousand, hundred, or ten
14. Find the cost of one item given the total cost of a number of identical items
20. Solve a one-step word problem using multiplication or division

GRADE 6 - READING

Twenty reading objectives were tested at the sixth grade level. The average sixth grade student answered two out of three items correctly on 16 of the 20 objectives measured.

Sixth grade students performed with greatest success on test questions testing the following objectives:

The learner will identify:

2. The suffix of a suffixed word
3. The prefix of a prefixed word
7. The noun to which a pronoun refers in a sentence
13. The alphabetical order of words by third and fourth letters
20. Page references for a topic in an index

Students had the greatest difficulty with test questions testing these objectives:

The learner will identify:

6. Singular or plural nouns used correctly in sentences
8. The correct use of a period, question mark, or comma
9. The correct use of capital letters in sentences
19. The page, chapter, or section references for a topic from a table of contents page

GRADE 6 - MATHEMATICS

Twenty mathematics objectives were tested at the sixth grade level. The average sixth grade student answered two out of three items correctly on 16 of the 20 objectives measured.

Sixth grade students performed with greatest success on test questions testing the following objectives:

The learner will:

1. Identify the word name for a 3- or a 4-digit number
2. Order from least to greatest three numbers less than 1,000
5. Add three numbers between 100 and 10,000
9. Solve a one-step word problem using addition or subtraction
11. Identify the length of an object with a centimeter ruler

Students had the greatest difficulty with test questions testing these objectives:

The learner will:

12. Find the area of a rectangle
15. Multiply two decimals, each with two or three places
18. Divide a fraction by a fraction
20. Identify the average of a set of numbers

GRADE 8 - READING

Twenty reading objectives were tested at the eighth grade level. The average eighth grade student answered two out of three items correctly on 18 of the 20 objectives measured.

Eighth grade students performed with greatest success on test questions testing the following objectives:

The learner will identify:

2. The noun to which a pronoun refers in a sentence
6. The sequence of the main events in a reading selection
11. The page, chapter, or section references for a topic from a table of contents page
14. The proper response to a road sign
18. Specified information from a page in a telephone book

Students had the greatest difficulty with test questions testing these objectives:

The learner will identify:

17. The appropriate information to fill in blanks on a form
19. The amount of the bill for food ordered from a menu

GRADE 8 - MATHEMATICS

Twenty mathematics objectives were tested at the eighth grade level. The average eighth grade student answered two out of three items correctly on 15 of the 20 objectives measured.

Eighth grade students performed with greatest success on test questions testing the following objectives:

The learner will:

1. Add three numbers between 100 and 10,000
2. Subtract 3-, 4-, or 5-digit numbers with regrouping
3. Multiply a 3-digit and a 2-digit number
8. Subtract decimals in vertical format
15. Find the total income from average weekly incomes

Students had the greatest difficulty with test questions testing these objectives:

The learner will:

6. Subtract two mixed numbers with regrouping
7. Multiply two mixed numbers
11. Identify the percent equivalent to a 1- or 2-place decimal
13. Identify the average of a set of numbers
17. Determine unit costs and indicate which unit cost is less expensive

GRADE 11 - READING

Twenty reading objectives were tested at the eleventh grade level. The average eleventh grade student answered two out of three items correctly on 17 of the 20 objectives measured.

Eleventh grade students performed with greatest success on test questions testing the following objectives:

The learner will:

1. Read a catalog description and determine the appropriate information to write in the blanks of an order form
9. Choose the best consumer product for a specific purpose from information on a label
14. Identify the meaning of caution labels on bottles or cans
15. Identify the proper response to a road sign
19. Identify specified information from a page in a telephone book

Students had the greatest difficulty with test questions testing these objectives:

The learner will:

2. Identify passages based on logic rather than emotional appeal in advertisements
4. Choose the most reliable source of information for a specified topic
7. Select the more economical buy from pairs of like products

GRADE 11 - MATHEMATIC

Twenty mathematics objectives were tested at the eleventh grade level. The average eleventh grade student answered two out of three items correctly on 17 of the 20 objectives measured.

Eleventh grade students performed with greatest success on test questions testing the following objectives:

The learner will:

3. Compute the actual distance between two points using the scale of a map
8. Find the total income from average weekly incomes
9. Calculate wages from the hourly wage and the number of hours worked
11. Find the take home pay from salary and deductions
13. Find multiples of itemized weekly expenses

Students had the greatest difficulty with test questions testing these objectives:

The learner will:

2. Identify the length of an object to the nearest 1, .1, or .5 centimeter using a centimeter ruler
10. Determine unit costs and indicate which unit cost is less expensive
12. Figure daily amounts from a weekly budget

APPENDIX

KANSAS COMPETENCY BASED EDUCATION
PILOT ASSESSMENT PROGRAM (1978-79)

Reading Objectives - Grade 2

Number	Objective
1	Given a set of letters, the learner will identify the one letter that is a vowel.
2	Given a sentence with a word omitted, the learner will use context clues to identify the word to correctly complete the sentence.
3	Orally given a word that begins with a single consonant sound, the learner will identify a pictured object whose name has the same initial consonant sound.
4	Orally given pairs of words, the learner will identify the word that has the same final consonant sound.
5	Given a set of illustrations, the learner will identify a conclusion about the situation depicted.
6	Orally given a word that begins with a consonant blend sound, the learner will identify a word that has the same initial consonant blend sound.
7	Orally given a word that begins with the sound /wh/ or /ch/ or /sh/, the learner will identify the letters (wh, ch, or sh) that stand for the initial consonant digraph sound.
8	Given sentences, the learner will identify statements as real or make-believe.
9	Orally given a word that has a short vowel sound, the learner will identify a word that has the same short vowel sound.
10	Orally given pairs of words, the learner will identify the words that have the same long vowel sound.
11	Orally given a story that describes an object, person, or event, the learner will identify an illustration for the story.
12	Orally given a story, the learner will sequence illustrations of the main events in the story.
13	Given a word, the learner will identify a word in the same classification.
14	Given a reading selection, the learner will identify the main idea.

15 Given a set of letters, the learner will identify the alphabetical order of the letters.

Sample Objective Grade 2 Reading

Given a sentence with a word omitted, the learner will use context clues to identify the word to correctly complete the sentence.

Sample test item:

Amy went to the _____ to see the lions.

A. store

B. school

C. playground

D. zoo

KANSAS COMPETENCY BASED EDUCATION
PILOT ASSESSMENT PROGRAM (1978-79)

Reading Objectives - Grade 4

Number	Objective
1	Orally given a word that has the short vowel sound /ă/ or /ĕ/ or /ŏ/, the learner will identify a word that has the same short vowel sound.
2	Given an unfamiliar word in context, the learner will identify the meaning of the word.
3	Given a word that has two vowels in the medial position, the learner will identify which letter is sounded or which letter is silent.
4	Given a contraction, the learner will identify the two words that form the contraction.
5	Given a sentence with a noun omitted, the learner will identify a singular or plural noun to correctly complete the sentence.
6	Orally given a two-, three-, or four-syllable word, the learner will identify the number of syllables it contains.
7	Given sentences, the learner will identify the correct use of a period, a question mark, or a comma.
8	Given sentences, the learner will identify the correct use of capital letters for a proper name, a place name, or a book title.
9	Given an abbreviation, the learner will identify the word that the abbreviation represents.
10	Given a reading selection, the learner will identify a detail from the material in the selection.
11	Given a reading selection, the learner will identify a sentence that summarizes it.
12	Given a reading selection, the learner will identify the main idea.
13	Given a reading selection, the learner will identify the sequence of the main events.
14	Given a reading selection, the learner will identify a conclusion based on the material in the selection.
15	Given a set of words, the learner will identify by second and third letters the word that comes first in alphabetical order.

16 Given a set of guide words, the learner will identify a word that could be found on a particular dictionary page.

17 Given a sample dictionary page and a word in context, the learner will identify the correct definition of the word.

18 Given an illustration of encyclopedia volumes, the learner will identify the volume that has information on a specific topic.

19 Given a sample table of contents page, the learner will identify the page, chapter, or section references for a specific topic.

20 Given a sample index page, the learner will identify page references for a specific topic.

Sample Objective Grade 4 Reading

Given a set of words, the learner will identify by second and third letters the word that comes first in alphabetical order.

Sample test item:

In the set of words below, find the word that comes first in a alphabetical order.

A. fruit

B. flake

C. friend

D. flute

KANSAS COMPETENCY BASED EDUCATION
PILOT ASSESSMENT PROGRAM (1978-79)

Reading Objectives - Grade 6

Number	Objective
1	Given a contraction, the learner will identify the two words that form the contraction.
2	Given a suffixed word, the learner will identify the suffix.
3	Given a prefixed word, the learner will identify the prefix.
4	Given the singular form of a noun that forms its plural by the addition of s or es, the learner will identify the plural form.
5	Given an unfamiliar word in context, the learner will identify the meaning of the word.
6	Given sentences, the learner will identify the sentence in which the singular or plural nouns are used correctly.
7	Given a sentence with a pronoun, the learner will identify the noun that the pronoun refers to.
8	Given sentences, the learner will identify the correct use of a period, a question mark, or a comma.
9	Given sentences, the learner will identify the correct use of capital letters for a proper name, a place name, or a book title.
10	Given a reading selection, the learner will identify the main idea.
11	Given a reading selection, the learner will identify the sequence of the main events.
12	Given a reading selection, the learner will identify a sentence that summarizes it.
13	Given a set of words, the learner will identify by third and fourth letters the word that comes first in alphabetical order.
14	Given a set of guide words, the learner will identify a word that could be found on a particular dictionary page.
15	Given a sample dictionary page and a word in context, the learner will identify the correct definition of the word.

16 Given a pronunciation key and a word, the learner will identify the correct pronunciation of the word.

17 Given a reading selection, the learner will identify a conclusion based on the material in the selection.

18 Given a sentence with a key word, the learner will identify the key word to use to find a topic in an encyclopedia.

19 Given a sample table of contents page, the learner will identify the page, chapter, or section references for a specific topic.

20 Given a sample index page, the learner will identify page references for a specific topic.

Sample Objective Grade 6 Reading

Given an unfamiliar word in context, the learner will identify the word.

Sample test item:

Find the meaning of each underlined word as it is used in the sentence.

The currency for buying things changes from country to country.

What does currency mean?

A. reason

B. material

C. schedule

D. money

KANSAS COMPETENCY BASED EDUCATION
PILOT ASSESSMENT PROGRAM (1978-79)

Reading Objectives - Grade 8

Number	Objective
1	Given a word with a common prefix and the meaning of its root, the learner will identify the meaning of the word.
2	Given a sentence with a pronoun, the learner will identify the noun that the pronoun refers to.
3	Given sentences, the learner will identify the correct use of a period, a question mark, or a comma.
4	Given sentences, the learner will identify the correct use of capital letters for a proper name, a place name, or a book title.
5	Given a reading selection, the learner will identify the main idea.
6	Given a reading selection, the learner will identify the sequence of the main events.
7	Given a reading selection, the learner will identify a conclusion based on the material in the selection.
8	Given sentences that are statements of fact or opinion, the learner will identify the sentence that is a statement of opinion.
9	Given an unfamiliar word in context, the learner will identify the meaning of the word.
10	Given a sample dictionary page and a word in context, the learner will identify the correct definition of the word.
11	Given a sample table of contents page, the learner will identify the page, chapter, or section references for a specific topic.
12	Given a sample index page, the learner will identify page references for a specific topic.
13	The student must identify the meaning of words printed on bottles or cans that caution the user against certain dangers.
14	Given the meaning of a road sign, the student must identify the correct sign, or given a road sign, the student must identify its meaning.
15	Given a set of simple directions, the student must follow the directions precisely.

16 Given a common sign, such as EXPLOSIVE, TRESPASSERS WILL BE PROSECUTED, and PROCEED AT OWN RISK, the student must be able to identify its meaning.

17 Given an application for a social security number, the student will be able to select the appropriate information that fits in a specified blank on the form.

18 Given a page from a telephone book, the student must be able to locate specified information such as emergency numbers or alphabetical listings.

19 Given a menu, the student must be able to order a meal and know what the bill will be.

20 Given an ad, the student must be able to identify the facts presented.

Sample Objective Grade 8 Reading

Given sentences that are statements of fact or opinion, the learner will identify the sentence that is a statement of opinion.

Sample test item:

Directions: Find the sentence that is a statement of opinion, not fact.

A. All students should have an hour of homework every night.

B. An island is a body of land with water all around it.

C. Staying in the sun all day can result in a sunburn.

D. Small children should not play with matches.

KANSAS COMPETENCY BASED EDUCATION
PILOT ASSESSMENT PROGRAM (1978-79)

Reading Objectives - Grade 11

Number	Objective
1	Given a catalog description and an order form, the student will identify the correct placement of the item's color, code number, price, weight, size, mailing charges, and description.
2	Given examples of advertising from various media sources, the student will identify those passages which are based on logic as contrasted with those based on emotional appeal. (Such as mileage ratings versus the suggestion of services the product is incapable of providing.)
3	Given pairs of statements containing one fact and one opinion, the student will correctly identify each statement as fact or opinion.
4	Given a subject such as taxation, the student will identify those sources which would provide reliable information from a list of possible sources.
5	Given a portion of a completed income tax form, the student will identify such terms as net income, gross income, deductions, spouse, dependents, and royalties and dividends.
6	The student will identify terms commonly encountered in insurance policies such as collision, liability, term policy, beneficiary, maturity, indemnity, rider, and addendum.
7	Given product information such as quantity, delivery charges, and unit cost, the student will select the more economical buy from pairs of like products.
8	Given a contract, the student will identify total interest paid, penalties, length of term, payment dates, and early payoff penalties.
9	Given a choice of consumer products, inclusive of food and medicine, the student will demonstrate understanding of labels, ingredients, and directions, and select the one best suited for his specific purpose.
10	Given an emergency situation, the student must be able to select a community agency to which he can turn for help, such as Emergency Medical.

11 Given a warranty certificate, the student will identify the duration, limitations, claims procedures, and proof of purchase clause.

12 Given a passage from a driver's handbook, the student must be able to recall factual details pertinent to automobile and motorcycle safety.

13 The student must identify the meaning of medical terminology or instructions printed on bottles or cans.

14 The student must identify the meaning of words printed on bottles or cans that caution the user against certain dangers.

15 Given the meaning of a road sign, the student must identify the correct sign, or given a road sign, the student must identify its meaning.

16 Given a set of simple directions, the student must follow the directions precisely.

17 Given a common sign, such as EXPLOSIVE, TRESPASSERS WILL BE PROSECUTED, and PROCEED AT OWN RISK, the student must be able to identify its meaning.

18 Given an application form, the student must be able to select the information that fits in a specified blank.

19 Given a page from a telephone book, the student must be able to locate specified information such as emergency numbers or alphabetical listings.

20 Given a statement from a business, the student must identify the item purchased, the cost, and the date payment is due.

Sample Objectives Grade 11 Reading

Given a set of simple directions, the student must follow the directions precisely.

Sample test item:

Directions: These directions tell you how to answer the questions below. Pay no attention to what the questions say. They are fake questions and no correct answers are given. Mark A as the answer to question 1. Mark D as the answer to question 2. Mark B as the answer to question 3.

1. Who is the president of Mexico?

   A. Pancho Villa
   B. Carmen Miranda
   C. Ludovico Sforza
   D. Seiji Ozawa

2. How many miles are there in a furlong?

   A. 5
   B. 8
   C. 12
   D. 16

3. Which of the following countries have no seacoast?

   A. Great Britain
   B. France
   C. India
   D. China

KANSAS COMPETENCY BASED EDUCATION
PILOT ASSESSMENT PROGRAM (1978-79)

Mathematics Objectives - Grade 2

Number	Objective
1	Given four numerals, the learner will identify the one that represents a number between 10 and 100 as specified.
2	Given a number less than 9, the learner will identify the number that is one more than the given number.
3	Given two consecutive even 1-digit numbers or two consecutive odd 1-digit numbers, the learner will identify the number that comes between the given numbers.
4	Given a sequence of three to five numbers formed by skip-counting by 2 (beginning with 2), by 5 (beginning with 5), or by 10 (beginning with 10), the learner will identify the next number in the sequence.
5	Given a 2-digit number represented by a diagram such as tens: 4 | ones: 3 the learner will identify the standard numeral for the number.
6	Given an addition problem in vertical format with two 1-digit addends whose sum is 12, 13, or 14, the learner will identify the sum.
7	Given an addition problem involving a 1-digit number, a 2-digit number, and no regrouping, the learner will identify the sum.
8	Given an addition problem involving two 2-digit numbers and no regrouping, the learner will identify the sum.
9	Given an oral word problem that can be solved by adding two 1-digit numbers, the learner will identify the solution.
10	Given a subtraction problem in vertical format with a sum less than 6, the learner will identify the difference.
11	Given a subtraction problem in horizontal format with a sum of 8 or 9, the learner will identify the difference.
12	Given a subtraction problem in vertical format involving subtraction of a 1-digit number from itself or subtraction of zero from a 1-digit number, the learner will identify the difference.

13 Given a picture of a line of four objects facing left, the learner will identify the first, second, third, or fourth object as specified.

14 Given a picture of a clock showing an hour and given four times stated as "____o'clock," the learner will identify the time shown on the clock.

15 Given a picture of one to five pennies, the learner will identify the number of cents pictured.

Sample Objective Grade 2 Mathematics

Given an addition problem involving two 2-digit numbers and no regrouping, the learner will identify the sum.

Sample test item:

Teacher will read: "Add the following numbers and mark the correct answer."

16 +21	15 ()	27 ()	35 ()	37 ()

KANSAS COMPETENCY BASED EDUCATION
PILOT ASSESSMENT PROGRAM (1978-79)

Mathematics Objectives - Grade 4

Number	Objective
1	The learner will identify the word name for a 3- or 4-digit numeral.
2	Given different arrangements of three numbers less than 1000, the learner will select the arrangement in which the numbers are listed in order from least to greatest.
3	Given a segment of a whole number line with the 1- or 2-digit numeral that labels one point missing, the learner will identify the missing numeral.
4	Given the expanded numeral for a 3- or 4-digit number, the learner will identify the standard numeral for that number. (Example of the form of the expanded numeral: 700 + 20 + 5.)
5	The learner will identify the place value of a digit in a 4-digit numeral.
6	The learner will recognize the approximation of a given 4-digit number to the nearest thousand, hundred, or ten.
7	The learner will add two 3-digit numbers with regrouping.
8	The learner will multiply two 2-digit numbers.
9	Given a region divided into 2, 4, or 5 congruent parts, the learner will identify the fraction that describes the shaded part of the region.
10	Given the pictures of several plane figures, the learner will identify the figure that has the same size and shape as a given figure.
11	Given pictures of an object and a centimeter ruler with one end of the object and one end of the ruler aligned, the learner will identify the length of the object.
12	Given the prices of two or three items expressed with dollar signs and decimal points, the learner will identify the total cost.
13	Given the cost of an item expressed with a dollar sign and a decimal point and the amount of money given to the clerk, the learner will identify the amount of change.

14 Given the total cost of a number of identical items expressed with a dollar sign and a decimal point, the learner will identify the cost of a single item.

15 The learner will read data from a bar graph.

16 The learner will read data from a line graph.

17 Given a division problem with a 1- or 2-digit dividend, a 1-digit divisor, a 1-digit quotient, and no remainder, the learner will identify the quotient. (Division facts)

18 Given a division problem with a 2-digit dividend, a 1-digit divisor, and a 2-digit quotient with no regrouping and no remainder, the learner will identify the quotient.

19 Given a one-step word problem that can be solved by addition or subtraction, the learner will solve the problem.

20 Given a one-step word problem that can be solved by multiplication or division, the learner will solve the problem.

Sample Objective Grade 4 Mathematics

Given a one-step word problem that can be solved by addition or subtraction, the learner will solve the problem.

Sample test item:

Ted had 47 baseball cards. He gave 28 away. How many baseball cards does Ted have left?

A. 8

B. 15

C. 19

D. 27

KANSAS COMPETENCY BASED EDUCATION
PILOT ASSESSMENT PROGRAM (1978-79)

Mathematics Objectives - Grade 6

Number	Objective
1	The learner will identify the word name for a 3- or 4-digit numeral.
2	Given different arrangements of three numbers less than 1000, the learner will select the arrangement in which the numbers are listed in order from least to greatest.
3	The learner will identify the place value of a digit in a 4-digit numeral.
4	The learner will recognize the approximation of a given 4-digit number to the nearest thousand, hundred, or ten.
5	The learner will add three numbers greater than 100 and less than 10,000.
6	The learner will subtract a 4- or 5-digit number from a 5-, 6-, or 7-digit number with regrouping.
7	The learner will multiply a 4- or 5-digit number and a 3- or 4-digit number.
8	The learner will divide a 3- or 4-digit number by a 2-digit number with a remainder.
9	Given a one-step word problem that can be solved by addition or subtraction, the learner will solve the problem.
10	Given a one-step word problem that can be solved by multiplication or division, the learner will solve the problem.
11	Given pictures of an object and a centimeter ruler with one end of the object and one end of the ruler aligned, the learner will identify the length of the object.
12	Given a picture of a rectangle with the lengths of sides indicated, the learner will identify the area.
13	Given a problem presented in vertical form, the learner will add two decimals, each with 1, 2, or 3 places.
14	Given a problem presented in vertical form, the learner will subtract a 1-, 2-, or 3-place decimal from a 2- or 3-place decimal.

15 The learner will multiply two decimals, each with 2 or 3 places.

16 The learner will divide a 1-, 2-, or 3-place decimal by a whole number with no remainder.

17 The learner will multiply two fractions.

18 The learner will divide a fraction by a fraction.

19 The learner will read data from a line graph.

20 The learner will identify the average (mean) of a given set of whole numbers.

Sample Objective Grade 6 Mathematics

Given different arrangements of three numbers less than 1000, the learner will select the arrangement in which the numbers are listed in order from least to greatest.

Sample test item:

In which list are the numbers in order from least to greatest?

A. 536; 789; 800

B. 800; 536; 789

C. 536; 800; 789

D. 789; 536; 800

KANSAS COMPETENCY BASED EDUCATION
PILOT ASSESSMENT PROGRAM (1978-79)

Mathematics Objectives - Grade 8

Number	Objective
1	The learner will add three numbers greater than 100 and less than 10,000.
2	The learner will subtract a 3-digit number from a 3-, 4-, or 5-digit number with regrouping.
3	The learner will multiply a 3-digit number and a 2-digit number.
4	The learner will divide a 3- or 4-digit number by a 2-digit number with a remainder.
5	The learner will add two mixed numbers with no regrouping.
6	The learner will subtract two mixed numbers with regrouping.
7	The learner will multiply two mixed numbers.
8	Given a problem presented in vertical form, the learner will subtract a 1-, 2-, or 3-place decimal from a 2- or 3-place decimal.
9	The learner will multiply two decimals, each with 2 or 3 places.
10	The learner will divide a 1-, 2-, or 3-place decimal by a 1-, 2-, or 3-place decimal with no remainder.
11	The learner will identify the percent that is equivalent to a given 1- or 2-place decimal.
12	Given a picture of a rectangle with the lengths of the sides indicated, the learner will identify the area.
13	The learner will identify the average (mean) of a given set of whole numbers.
14	Given the total bill and the amount of money paid to the cashier, the student must determine the number and variety of bills and coins to be given in change.
15	Given the average weekly income (babysitting, odd jobs, and the like) and the number of weeks the income is received, the student must find the total income.
16	Given the hourly wage and the number of hours worked in a week, the student must determine the weekly, monthly, and yearly wages.

17 Given the cost of a specific quantity of a product and the cost of a different quantity of the same product, the student must determine the cost per unit for both quantities and state which rate is cheaper.

18 Given a salary and the deductions, the student must determine the amount of take-home pay.

19 Given the cost of an item such as a ten-speed bicycle, the student must determine how much would have to be saved for any given number of weeks to pay for the item, without considering any interest that might be earned.

20 Given traveling time and rate, the student must determine the distance traveled.

Sample Objective Grade 8 Mathematics

The learner will multiply two decimals, each with 2 or 3 places.

Sample test item:

Multiply

.073
x .19

A. .01387

B. .1387

C. 1.387

D. 13.87

KANSAS COMPETENCY BASED EDUCATION
PILOT ASSESSMENT PROGRAM (1978-79)

Mathematics Objectives - Grade 11

Number	Objective
1	The learner will identify the average (mean) of a given set of whole numbers.
2	Given pictures of an object and a centimeter ruler with one end of the object and one of the ruler aligned, the learner will identify the length of the object.
3	Given the scale of a map and the distance between the points representing two cities on the map, the learner will compute the actual distance between the two cities.
4	Given a word problem involving the percent of interest on savings or on a loan, the learner will compute the amount of interest.
5	Given a picture of a polygon with the lengths of the sides indicated, the learner will identify the perimeter.
6	Given a picture of a rectangle with the lengths of sides indicated, the learner will identify the area.
7	Given the total bill and the amount of money paid to the cashier, the student must determine the number and variety of bills and coins to be given in change.
8	Given the average weekly income (babysitting, odd jobs, and the like) and the number of weeks the income is received, the student must find the total income.
9	Given the hourly wage and the number of hours worked in a week, the student must determine the weekly, monthly, and yearly wages.
10	Given the cost of a specific quantity of a product and the cost of a different quantity of the same product, the student must determine the cost per unit for both quantities and state which rate is cheaper.
11	Given a salary and the deductions, the student must determine the amount of take-home pay.
12	Given the amount of weekly allowance and the fractional part of the allowance to be spent on various items, the student must compute the amount to be allocated to each item in a daily budget.
13	Given an itemized list of summer camp expenses for one week, the student must find the cost of attending camp for any number of weeks (less than or equal to 8).

14 Given a list of purchased items, the amount charged for each item, and the sales tax rate, the student must demonstrate how a sales slip would show the price of each item, the tax, and the total bill.

15 Given the cost of an item such as a ten-speed bicycle, the student must determine how much would have to be saved for any given number of weeks to pay for the item, without considering any interest that might be earned.

16 Given the number of pieces of work completed daily and the rate per piece, the student must determine the weekly wage.

17 Given the cost of an item such as a ten-speed bicycle and an itemized list of accessories, the student must find the average monthly payment over a period of one year if the money were borrowed.

18 Given an itemized list of the amounts of various materials used in constructing an item and the cost per unit of each material, the student must determine the total cost of the materials necessary to construct the item.

19 Given traveling time and rate, the student must determine the distance traveled.

20 Given the measurements of a room, the student must determine how much floor covering is needed.

Sample Objectives Grade 11 Mathematics

Given the average weekly income (babysitting, odd jobs, and the like) and the number of weeks the income is received, the student must find the total income.

Sample test item:

Paula works 10 hours each week. She earns $2.35 an hour. How much does she earn in a week?

A. $4.70

B. $23.50

C. $94.00

D. $235.00